

Title (en)
A process for production of ceramic bearing components

Title (de)
Verfahren zur Herstellung keramischer Lagerbauteile

Title (fr)
Procédé de fabrication d'un élément céramique de palier

Publication
EP 1331211 A3 20050622 (DE)

Application
EP 03000481 A 20030111

Priority
DE 10203473 A 20020125

Abstract (en)
[origin: EP2130805A1] The method involves producing a material mixture from an organometallic compound as a preceramic precursor and from silicon in a form of an alloy as a chemically reactive filler. The material mixture is subjected to a reaction pyrolysis to convert the material mixture into a ceramic material. The material mixture contains zirconium oxide and/or aluminum oxide and/or silicon carbide and/or silicon nitride to improve mechanical properties and/or reaction kinetics. The reaction pyrolysis is carried out partially in a chemically inert gas atmosphere or in a vacuum.

IPC 1-7
C04B 35/589; F16C 33/04; F16C 33/30; C04B 35/571

IPC 8 full level
F16C 33/14 (2006.01); **C04B 35/589** (2006.01); **C04B 35/591** (2006.01); **F16C 33/04** (2006.01); **F16C 33/30** (2006.01)

CPC (source: EP US)
C04B 35/589 (2013.01 - EP US); **F16C 33/043** (2013.01 - EP US); **F16C 33/30** (2013.01 - EP US)

Citation (search report)

- [EX] EP 1310469 A2 20030514 - SKF AB [SE]
- [Y] DE 19855811 A1 20000608 - CFI CERAMICS FOR INDUSTRY GMBH [DE]
- [Y] DE 4318974 A1 19941215 - FRAUNHOFER GES FORSCHUNG [DE]
- [A] DE 2803658 A1 19780810 - KYOTO CERAMIC

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EP 03000481 A 20030111; AT 03000481 T 20030111; AT 09012064 T 20030111; DE 10203473 A 20020125; DE 50312636 T 20030111; DE 50313005 T 20030111; EP 09012064 A 20030111; JP 2003015579 A 20030124; US 35152603 A 20030127